

٠,

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address COMMISSIONER FOR PATENTS P.O. Boo 1450 Alexandry, Virginia 22313-1450 www.uspb.go.

APPLICATION NO.	FILI	NG DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/841,687	7 04/23/2001		Robert F. Tow	INT1P034	4379	
21912	7590	05/02/2006		EXAMINER		
VAN PELT	•		PESIN, BORIS M			
CUPERTIN	OOTHILL B O, CA 950			ART UNIT	PAPER NUMBER	
				2174	2174	
				DATE MAILED: 05/02/2006		

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
	09/841,687	TOW ET AL.				
Office Action Summary	Examiner	Art Unit				
	Boris Pesin	2174				
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the	correspondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is expecified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATIO 16(a). In no event, however, may a reply be ti rill apply and will'expire SIX (6) MONTHS fror cause the application to become ABANDONI	N. mely filed n the mailing date of this communication. ED (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on 16 Fe	ebruary 2006.					
	action is non-final.					
·—	, 					
closed in accordance with the practice under E	x parte Quayle, 1935 C.D. 11, 4	53 O.G. 213.				
Disposition of Claims						
: 4)⊠ Claim(s) <u>1-5,9-19,22-42 and 46-54</u> is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1-5,9-19,22-42 and 46-54</u> is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/o	r election requirement.	•				
Application Papers						
9) The specification is objected to by the Examine	r					
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Ex						
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority documents 2. Certified copies of the priority documents	s have been received. s have been received in Applica	tion No				
3. Copies of the certified copies of the prior		ved in this National Stage				
* See the attached detailed Office action for a list		ved				
dec the attached detailed office deficit for a list	or the definied dopies not recent					
,	·	•				
Attachment(s)						
1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413)						
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date	Paper No(s)/Mail I					
S. Patent and Trademark Office						

Art Unit: 2174

DETAILED ACTION

Response to Amendment

This communication is responsive to the amendment filed 02/16/2006.

Claims 1-5, 9-19, 22-42 and 46-54 are pending in this application. Claims 1, 17, 24, 32, 35, 38, and 54 are independent claims. In the amendment filed 02/16/2005, Claims 1, 17, 24, 32, 35, and 38 were amended and claim 54 was added as new. This action is made Final.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claim 54 is rejected under 35 U.S.C. 102(e) as being anticipated by Perlman et al. (US 6141693).

In regards to claim 54, Perlman teaches a method for selecting a compressed bit stream using associated video information, the method comprising: identifying motion information associated with a plurality of compressed bit streams (i.e. the video processor uses the received auxiliary data to identify a portion of the at least one video

Art Unit: 2174

frame, Abstract, Line 12); processing motion information to generate processed motion information (i.e, render a motion picture on a video display device, Column 8, Line 66); providing the processed motion information for each of the plurality of compressed bit streams to the client, wherein providing the processed motion information allows the client to identify video information in the bit stream (i.e. video stream to the client, Column 3, Line 50); and receiving a selection from the client of a compressed bit stream from among the plurality of compressed video bit streams (Column 3, Lines 45-51).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

- 1. Determining the scope and contents of the prior art.
- 2. Ascertaining the differences between the prior art and the claims at issue.
- 3. Resolving the level of ordinary skill in the pertinent art.
- Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-2, 6, 17, 24, 28, 32, 35, 38, 42, and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Perlman et al. (US 6141693) in view of Horne (US 5473379) further in view of Wilcox et al. (US 6072542).

Art Unit: 2174

In regards to claim 1, Perlman teaches a method of identifying motion information associated with a compressed bit stream (i.e. the video processor uses the received auxiliary data to identify a portion of the at least one video frame, Abstract, Line 12). He further discloses a method for processing motion information to generate processed motion information (i.e., render a motion picture on a video display device, Column 8, Line 66). He further provides a method for providing the processed motion information to the client, wherein providing the processed motion information allows the client to identify video information in the bit stream (i.e. video stream to the client, Column 3, Line 50); and receiving a selection of a location in the bit stream from the client (Column 3, Lines 45-51). Perlman does not teach a method that includes determining motion information coherence by dividing a magnitude of averaged motion vectors by an average magnitude of motion vectors, wherein a motion vector indicates a direction of motion included with the video information. Horne teaches, "In step 406 the common motion vector is calculated for the current frame. The common motion vector may be the average motion vector determined by dividing the motion vector total by the number of vectors, C, received for the frame, or in other words, MVT/C. Alternatively, the common motion vector may suitably be the median motion vector or some other value" Column 12, Line 65, Column 13, Line 4). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Perlman with the teachings of Horne and include a method for determining motion information coherence with the motivation to enable compensation for greater amounts of motion (Horne, Column 2, Line 65). Perlman and Horne do not teach determining motion information magnitude. Wilcox

Art Unit: 2174

teaches, "The first feature is the magnitude of the average of the nine motion vectors." (Column 6, Line 5). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Perlman and Horne with the teachings of Wilcox to include a method for determining motion information magnitude with the motivation to provide for more accurate identification of video segments. (Column 2, Line 20).

In regards to claim 2, Perlman and Horne teach all the limitations of claim 1.

Perlman further teaches that the compressed bit stream is an MPEG compressed bit stream. (Column 6, Line 59)

In regards to claim 17, it is in the same context as claim 1 and 2, except that it includes the capability of displaying the information in a graphical user interface.

Perlman's invention discloses a graphical user interface. (Column 4, Line 44)

Claim 24 is in the same context as claim 1; it is therefore rejected under similar rationale.

Claim 28 is in the same context as claim 1; it is therefore rejected under similar rationale.

Claim 32 is in the same context as claim 1 and 2; it is therefore rejected under similar rationale.

Claim 35 is in the same context as claim 1 and 2; but it talks about computer code and a computer program. It is inherent in Perlman's invention that a computer program is used and therefore computer code is used.

Art Unit: 2174

Claim 38 is in the same context as claim 1 and 2, but it talks about the hardware aspects of the invention. Perlman discloses in his invention an interface (Column 7, Line 53), memory (Column 4, Line 5), and a CPU (Column 4, Line 4).

In regards to claim 42, Perlman discloses that you can store motion information in a database. (Column 1, Line 60)

Claim 43 is in the same context as claim 3; it is therefore rejected under similar rationale.

Claims 3, 18, 25, 33, 36, and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Perlman et al. (US 6141693) in view of Horne (US 5473379) further in view of Kuhn et al. (US 6297845).

In regards to claim 3, Perlman and Horne teach all the limitations of claim 1.

Perlman and Horne do not teach the limitation of having color bars provided to the client with the motion information. Kuhn teaches that color bars are already used in an NTSC signal (Column 6, Line 16). It would have been obvious to one of ordinary skill in the art at the time of the invention to use the teachings of Kuhn and modify Perlman and Horne to include color bars with the motivation provided to increase the quality of information provided.

Claim 18 is in the same context as claim 3; it is therefore rejected under similar rationale.

Claim 25 is in the same context as claim 3; it is therefore rejected under similar rationale.

Art Unit: 2174

Claim 33 is in the same context as claim 3; it is therefore rejected under similar rationale.

Claim 36 is in the same context as claim 3; it is therefore rejected under similar rationale.

Claim 39 is in the same context as claim 3; it is therefore rejected under similar rationale.

Claims 4, 19, 26, 34, 37, and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Perlman et. al. (US 6141693) in view of Horne (US 5473379) in view of Wilcox et al. (US 6072542) further in view of Yim (US 6452969).

In regards to claim 4, Perlman, Horne, and Wilcox teach all the limitations of claim 1. Perlman, Horne, and Wilcox do not teach that processed information is represented using hue, brightness, and saturation. Yim teaches, "the trichromatic theory of color vision implies that the perceived intensity of light which is made up of brightness, hue and saturation may be duplicated by an appropriate combination of three primary colors. Accordingly, each video frame may be represented by a grid of first primary color pels, second primary color pels, and third primary color pels."

(Column 4, Line 52). It would have been obvious to one of ordinary skill in the art at the time of the invention to use the teachings of Yim and modify Perlman, Horne, and Wilcox to include a method for representing the video with hue, brightness, and

Art Unit: 2174

saturation with the motivation provided for reducing the cost of the system (Yim, Column 2, Line 28).

Claim 19 is in the same context as claim 4; it is therefore rejected under similar rationale.

Claim 26 is in the same context as claim 4; it is therefore rejected under similar rationale.

Claim 34 is in the same context as claim 4; it is therefore rejected under similar rationale.

Claim 37 is in the same context as claim 4; it is therefore rejected under similar rationale.

Claim 40 is in the same context as claim 4; it is therefore rejected under similar rationale.

Claims 5, 27, and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Perlman et. al. (US 6141693) in view of Horne (US 5473379) in view of Wilcox et al. (US 6072542) further in view of Richmond et al. (US 5805156).

In regards to claim 5, Perlman, Horne, and Wilcox teaches all the limitations of claim 1. Perlman, Horne, and Wilcox do not teach the method of representing processed motion using an alarm. Richmond teaches, "In another scenario, the gateway computer system ... transmits an alert to a client computer system, wherein the user does not desire to immediately view the select media stream. The alert may consist of any audio/visual alarm." (Column 8, Line 42). It would have been obvious to

Art Unit: 2174

one of ordinary skill in the art at the time of the invention to modify Perlman, Horne, and Wilcox with the teachings of Richmond for the purpose of representing the feed using an alarm with the motivation to provide for making the system more informative for the user.

Claim 27 is in the same context as claim 5; it is therefore rejected under similar rationale.

Claim 41 is in the same context as claim 5; it is therefore rejected under similar rationale.

Claims 9, 10, 22, 23, 46, 47 is rejected under 35 U.S.C. 103(a) as being unpatentable over Perlman et al. (US 6141693) in view of Horne (US 5473379) in view of Wilcox et al. (US 6072542) further in view of Etoh (US 6081551).

In regards to claim 9, Perlman, Horne, and Wilcox teach all the limitations of claim 1. Perlman, Horne, and Wilcox do not teach the limitation of comparing motion information in the bit stream with a motion information template. Etch teaches, "...if it is judged by the correlation comparator ... that there is high correlation between the input image and the template, then the weighted motion compensator ... is selected, and pixels for the associated weighted region are input from the template" (Column 8, Line 39). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Perlman, Horne, and Wilcox using the teachings of Etch to include a

Art Unit: 2174

way to compare motion in a bit stream (i.e. input image) to that of a template with the motivation to provide for a sharper image quality. (Column 2, Line 55).

In regards to claim 10, Etoh teaches, "...if it is judged by the correlation comparator ... that there is high correlation between the input image and the template, then the weighted motion compensator ... is selected, and pixels for the associated weighted region are input from the template" (Column 8, Line 39).

Claim 22 is in the same context as claim 9; it is therefore rejected under similar rationale.

Claim 23 is in the same context as claim 10; it is therefore rejected under similar rationale.

Claim 46 is in the same context as claim 9; it is therefore rejected under similar rationale.

Claim 47 is in the same context as claim 10; it is therefore rejected under similar rationale.

Claims 11, 12, 30, 48, and 49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Perlman et. al. (US 6141693) in view of Horne (US 5473379) in view of Wilcox et al. (US 6072542) further in view of Rao et al. (US 6041142).

In regards to claim 11, Perlman, Horne, and Wilcox teach all the limitations of claim 1. They do not teach the limitation of identifying a scene cut using processed motion information. Rao teaches that in his invention, "The video data stream analyzer detects, i.e., identifies, a scene cut in a video data stream" (Column 7, Line 58). It

Art Unit: 2174

would have been obvious to one of ordinary skill in the art at the time of the invention to modify Perlman, Horne, and Wilcox with the teachings of Rao to include a method for identifying a scene cut with the motivation for faster transmition of the video feed.

In regards to claim 12, Rao discloses a display, (i.e. client, Figure 3, Element 130), that receives all of the processed information including the scene cut information.

Claim 30 is in the same context as claim 11; it is therefore rejected under similar rationale.

Claim 48 is in the same context as claim 11; it is therefore rejected under similar rationale.

Claim 49 is in the same context as claim 12; it is therefore rejected under similar rationale.

Claims 13, 14, 29, 50, 51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Perlman et al. (US 6141693) in view of Horne (US 5473379) in view of Wilcox et al. (US 6072542) further in view of Wang et al. (US 6212657).

In regards to claim 13, Perlman, Horne, and Wilcox teach all the limitations of claim 1. Perlman and Horne do not teach the limitation of identifying audio information from the compressed bit stream. Wang teaches "It should be understood that . . . the term "video" includes content having both audio and visual portions or exclusively audio or exclusively visual content, as well as other types of digital content." (Column 1, Line 35). He further teaches that "In one embodiment [of his invention], the processing modules are video decoders, each dedicated to decompressing a video data stream."

(Column 3, Line 35). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Perlman, Horne, and Wilcox with the teachings of Wang to include a method for identifying audio data with the motivation provided for transmitting sound.

In regards to claim 14, Wang teaches, "Video processors . . . receive video data (that form a video stream) from memory buffer . . . under the control of CPU . . . and then process each video stream for delivery to a client . . ." (Column 8, Line 20).

Claim 29 is in the same context as claim 13; it is therefore rejected under similar rationale.

Claim 50 is in the same context as claim 13; it is therefore rejected under similar rationale.

Claim 51 is in the same context as claim 14; it is therefore rejected under similar rationale.

Response to Arguments

Applicant's arguments filed 02/16/2006 have been fully considered but they are not persuasive.

In regards to the Applicant's argument that Perlman, Horne, and Kuhn do not teach "providing the processed motion information the client wherein providing the processed motion information allows the client to identify video information in the bit stream; and receiving a selection of a location in the bit stream form the client," the Examiner disagrees. As cited above in the rejection, the Examiner believes that

Art Unit: 2174

Perlman teaches those limitations, specifically in column 3 Lines 45-51. Perlman teaches, "retrieving a video stream requested by the client," therefore the location in the bit stream would be the beginning of the bit stream that is then downloaded to the client.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Art Unit: 2174

Inquiry

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Boris Pesin whose telephone number is (571) 272-4070. The examiner can normally be reached on Monday-Friday except every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kristine Kincaid can be reached on (571) 272-4063. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

BP

Bustine Kincaid
KRISTINE KINCAID
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100

Page 14